

### **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

#### **Listing of Claims:**

1. (Original) A delivery system for pharmaceutical agents wherein said system comprises liposomes which comprise in their internal compartment a pharmaceutical agent and which have linked to their external surface the cell adhesion molecule NCAM or a fragment thereof.
2. (Original) The delivery system of claim 1, wherein said NCAM fragment comprises IG loop domains I, II and III.
3. (Original) The delivery system according to claim 1 or 2, wherein said cell adhesion molecule is linked to said external surface of said liposomes via a transmembrane domain or a hydrophobic anchor molecule.
4. (Original) The delivery system according to anyone of the preceding claims, wherein said pharmaceutical agent is selected from the group consisting of DNA, RNA, oligonucleotides, polypeptides, peptides, antineoplastic agents, hormones, vitamins, enzymes, antivirals, antibiotics, antiinflammatories, antiprotozoans, antirheumatics, radioactive compounds, antibodies, prodrugs, and combinations thereof.

5. (Currently Amended) The delivery system according to claim 4, wherein said pharmaceutical agent is ~~a~~ DNA, ~~preferably a cDNA~~, which is operably linked to a gene expression construct.

6. (New) The delivery system according to claim 5, wherein said DNA is cDNA which is operably linked to a gene expression construct.

~~-6~~ 7. (Currently Amended) The delivery system according to claim 5, wherein said [c]DNA encodes a functional protein.

~~-7~~ 8. (Currently Amended) The delivery system according to claim ~~-6~~ 7, wherein said functional protein is the human dystrophin protein.

~~-8~~ 9. (Currently Amended) The delivery system according to ~~anyone of claim-s 5 to 6~~, wherein said delivery system comprises a DNA compacting agent.

10. (New) The delivery system according to claim 6, wherein said delivery system comprises a DNA compacting agent.

11. (New) The delivery system according to claim 7, wherein said delivery system comprises a DNA compacting agent.

12. (New) The delivery system according to claim 8, wherein said delivery system comprises a DNA compacting agent.

~~9~~ 13. (Currently Amended) The delivery system according to claim ~~8~~ 9, wherein said DNA compacting agent is a reversibly cross-linkable cation.

14. (New) The delivery system according to claim 10, wherein said DNA compacting agent is a reversibly crosslinkable cation.

15. (New) The delivery system according to claim 11, wherein said DNA compacting agent is a reversibly crosslinkable cation.

16. (New) The delivery system according to claim 12, wherein said DNA compacting agent is a reversibly crosslinkable cation.

~~10~~ 17. (Currently Amended) The delivery system according to claim 13, wherein said reversible cross-link is a thio bridge.

18. (New) The delivery system according to claim 14, wherein said reversible cross-link is a thio bridge.

19. (New) The delivery system according to claim 15, wherein said reversible cross-link is a thio bridge.

20. (New) The delivery system according to claim 16, wherein said reversible cross-link is a thio bridge.

~~14~~ 21. (Currently Amended) The delivery system according to anyone of claims 5- ~~10~~ 20, wherein said delivery system comprises a chemical inclusion and/or a biological inclusion for the breaching of the endosomal barrier.

~~12~~ 22. (Currently Amended) The delivery system according to anyone of claims 5- ~~11~~ 21, wherein said delivery system comprises a nuclear localisation signal ~~—preferably in the form of PNA-linked peptides or PNA-linked ligands—~~.

23. (New) The delivery system according to claim 22, wherein said nuclear localisation signal comprises PNA linked peptides or PDA linked ligands.

~~13~~ 24. (Currently Amended). The delivery system according to anyone of claims 5- [14] 23, wherein said delivery system comprises an anti-apoptotic activity.

~~14~~ 25. (Currently Amended) The delivery system according to claim ~~13~~ 24, wherein said anti-apoptotic activity is selected from the group consisting of Bcl-2, a small interfering RNA directed against Bax, a peptide comprising caspase inhibitor sequences, preferably Bcl XL.[.]

~~15~~ 26. (Currently Amended) The delivery system according to claims 4 to [14] 25, wherein

Serial No. TBD  
Preliminary Amendment dated January 10, 2005

said delivery system comprises a DNA integrase activity or a molecule encoding such a DNA integrase activity.

~~16~~ 27. (Currently Amended) The delivery system according to claim ~~15~~ 26, wherein said integrase is the integrase of phi C31 bacteriophage.

~~17~~ 28. (Currently Amended) A pharmaceutical composition comprising a delivery system according to claims 1 to ~~16~~ 27.